**In/Out Patterns Exam Review Name**

**Part I: One-Step Problems**

1. a. What are the next three terms in this series: 8, 16, 24…

b. Describe the pattern in words.

c. Describe the pattern in a math sentence.

d. What is the 100th term in the series?

1. Twenty-eight people walk into the empty cafeteria. The break into seven equal groups to work on their science projects. The project is due in two days. How many people are in each group?
2. Fill in the missing boxes and write the formula.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| in | 4 | 6 | 8 | 10 | 18 |
| out | 2 | 3 | ? | 5 | ? |

**Part II: Two-Step Problems**

1. a. For the formula 4x + 3 = y, what is the value of y when x equals 5?

b. When x equals 10?

c. When x equals 100?

1. Thirty-three people walk into the empty cafeteria. Three of the people are called to the office. The others break into six equal groups to work on their science projects. The project is due in four days. How many people are in each group?
2. Fill in the missing boxes and write the formula.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| in | 3 | 4 | 5 | 6 | 11 |
| out | 11 | 14 | 17 | 20 | ? |